

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application: William D. Denison et al.

Application No.: 10/807,935 Art Unit: 2635

Filed: March 24, 2004 Examiner: Brian A. Zimmerman

For: ELECTRONIC ACCESS CONTROL DEVICE

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APPEAL BRIEF (37 C.F.R. § 41.37)

This brief is in furtherance of the Notice of Appeal, co-filed in this case on June 13, 2006.

The fees required under § 41.20, and any required petition for extension of time for filing this brief and fees therefore, are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

I. REAL PARTY IN INTEREST

The real party in interest in this appeal is: Micro Enhanced Technology, Inc., the assignee.

II. RELATED APPEALS AND INTERFERENCES

With respect to other appeals or interferences that will directly affect, or be directly affected by, or have a bearing on the Board's decision in this appeal: there are appeals currently pending for related U.S. Patent Application Serial No. 10/807,936, filed March 24, 2004, and U.S. Patent Application Serial No. 10/885,998, filed July 7, 2004.

III. STATUS OF CLAIMS

The status of the claims in this application are:

A. TOTAL NUMBER OF CLAIMS IN APPLICATION

Claims in the application are: 1-48.

B. STATUS OF ALL THE CLAIMS

Claims 1-48 are rejected.

C. CLAIMS ON APPEAL

The Claims on appeal are: 1-48.

IV. STATUS OF AMENDMENTS

All cancellations and amendments filed subsequent to final rejection have been entered.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The independent claims involved in this appeal are claims 1, 8 and 15. A brief discussion of these independent claims is provided below with cites to the originally filed application to enable the Board to more quickly determine where the claimed subject matter is described in the specification. Applicant asserts that the below cites are not all inclusive, and reserves the right to provide additional cites, if needed.

Independent claim 1 is a method claim. Generally stated, the claim includes the steps of deactivating a circuit during a first time period and enabling a portion of the circuit for a second time period. p. 17, ln. 32 - p. 22, ln. 16. Also, an electromagnetic signal is sensed during the second time period, wherein the circuit is enabled for an extended time period that is greater than the second time period upon the sensing of the electromagnetic signal. p. 17, ln. 32 - p. 22, ln. 16. Moreover, the electromagnetic signal is processed during the extended time period to obtain an input code. p. 17, ln. 32 - p. 22, ln. 16. The input code is compared to an access code, wherein a signal to unlock a device is provided if the input code matches the access code. p. 17, ln. 32 - p. 22, ln. 16.

Independent claim 8 is also a method claim. Generally stated, the claim includes the steps of periodically enabling and disabling a circuit during each of a plurality of duty cycles wherein the circuit is enabled for a time t_1 during each of the duty cycles. p. 17, ln. 32 - p. 22, ln. 16. Furthermore, an input code transmitted via an electromagnetic signal is received and compared to an access code. p. 17, ln. 32 - p. 22, ln. 16. Also, the circuit is enabled as the input code is being received for a time t_2 that is greater than said time t_1 . p. 17, ln. 32- p. 22, ln. 16. Moreover, a signal to unlock a device is provided if the input code matches the access code. p. 17, ln. 32- p. 22, ln. 16.

Independent claim 15 is yet another method claim. Generally stated, the claim includes the steps of generating a signal to indicate detection of a device capable of providing an electromagnetic signal, and receiving an input code transmitted by the electromagnetic signal. p. 17, ln. 32 - p. 22, ln. 16. Also, the input code is compared to an access code, wherein an output to an unlock device is provided if the input code matches the access code. p. 17, ln. 32 - p. 22, ln. 16. Furthermore, the current drained from a battery is decreased after receiving the input code. p. 17, ln. 32 - p. 22, ln. 16.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- 1. Claims 1-4, 6-9, 11-17, 19 and 20-48 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Stengel (i.e., U.S. Patent No. 5,109,530) and Lemelson (i.e., U.S. Patent No. 4,354,189).
- 2. Claims 5, 10 and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Stengel and Lemelson and further in view of Stamm (i.e., U.S. Patent No. 4,353,064).

VII. ARGUMENT

First Ground of Rejection Under 35 U.S.C. § 103(a)

Applicants assert that all claims are allowable over the prior art of record under 35 U.S.C. § 103. Thus, the rejections should be overturned.

When applying 35 U.S.C. §103, a rejection must adhere to several tenets of patent law. These tenets include, among other things: 1) The claimed invention must be considered as a whole; 2) The references must be considered as a whole and must suggest

the desirability and thus the obviousness of making the combination; and 3) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention. *MPEP* 2141. Furthermore, the level of ordinary skill in the art at the time of the invention should be accessed to maintain objectivity. *MPEP* 2141.03. Moreover, all claim limitations must be taught or suggested by the prior art. *MPEP* 2143.03.

The Applicants respectfully assert that these requirements have not been satisfied. Instead, the claims in the current application have been rejected by: 1) using impermissible hindsight to correct for a failing to find a suggestion to combine the references; 3) overlooking the level or ordinary skill in the art; and 4) disregarding the language of the claims. As a result of these errors, the Applicants respectfully request that all claims in the application-at-issue be found allowable.

A. Teachings of the Cited Prior Art

Generally stated, all of the independent claims (i.e., claims 1, 8 and 15) in the application-at-issue require, among other things, a receiver that is periodically awaken and receives an electromagnetic signal during an extended awake period. Moreover, the input code is compared to an authorization code wherein a signal is provided to unlock a device if the codes match. In contrast, the prior art of record fails to teach or suggest this unique combination.

In Lemelson, a switch and lock activating system and method is disclosed. In one form, a ring is provided with electronic circuit means for generating a code that is wirelessly transmitted. *Lemelson*, Abstract. Moreover, an automatic means is provided for reading the code and causing a door lock to open. *Lemelson*, Col. 1, lns. 19-23. The automatic means is powered by a suitable source of electrical energy. *Lemelson*, Col. 4, lns. 47-52.

However, nothing is disclosed in Lemelson regarding conserving power as claimed by the Applicants in the application-at-issue. In the present application, conservation of battery power is an important objective which is not taken lightly by the

Applicants. In contrast, instead of conserving power, "a suitable source" of power in Lemelson is used and described as "a battery or line current, a combination of the two or other means for supplying electrical energy for powering the electronic devices associated with the various components illustrated and described." *Lemelson*, Col. 4, lns. 47-52.

Accordingly, Lemelson assumes that if more power is needed, then another suitable power source should be sought instead of making attempts to conserve power. Moreover, Lemelson does not provide for enabling a circuit for an extended time period so an input can be received. Thus, Lemelson fails to teach or suggest a receiver that is periodically awaken and, during an extended awake period, receives a signal containing an input code that is compared to an authorization code as currently claimed.

Turning to Stengel, a receiver with a battery saver is disclosed. In an aspect, a method is disclosed for saving battery energy in a portable radio having a receiver for recovering modulated signals modulated on a carrier signal. *Stengel*, Col. 2, lns. 5-8. "The method includes steps of detecting the presence of a non-valid coded squelch signal, decoding such non-valid squelch signal, and synchronizing the receiver with the detected non-valid coded squelch signal." *Stengel*, Col. 2, lns. 8-12. "The method further includes the step of placing the portable radio in a battery saver mode. *Stengel*, Col. 2, lns. 12-14.

In a detailed description of the preferred embodiment, Stengel explains that:

"...the receiver 100 receives, recovers, and decodes a non-valid coded squelch signal (CSS) and goes to sleep after synchronizing with the non-valid CSS. Periodically the receiver 100 wakes up in sync with the non-valid CSS to determine any change in the CSS. If no change in the CSS is determined the receiver 100 goes back to sleep. In the event that a change is determined the battery saver mode is departed and the receiver 100 continues to receive information."

Stengel, Col. 5, line 66 - Col., line 7.

Nothing is disclosed in Stengel regarding the applicability of the battery saver to unlocking devices. Moreover, like Lemelson, Stengel fails to teach or disclose a receiver that is periodically awaken and, during an extended awake period, receives a signal containing an input code that is compared to an authorization code, and providing a signal to unlock a device if the codes match.

Stated another way, with pager devices as taught by Stengel, the person carrying the pager is not required to react to a received signal from an outside source. In contrast, the present invention responds to all received signals by comparing an input code to an access code. Moreover, a pager must be attended by a person before a response to a received signal can be made. Conversely, the present invention does not need a person to perform a responsive task such as comparing an input code to an access code and activating a lock. Accordingly, Stengel fails to teach or suggest many elements of the claimed inventions.

B. Hindsight in Determining the Desirability in Making Combination

The prior art must suggest the desirability of the claimed invention. *MPEP* 2143.01(I). This requirement prevents the reliance on hindsight reconstruction of the applicant's invention. *MPEP* 2143.01(I). Here, the prior art fails to make any such suggestion. Instead, the suggestion is made only within the application-at-issue by the Applicants-now the Appellants.

Lemelson completely fails to show any methods for conserving power in a receiver for an unlocking device. As a result, Lemelson suffers from the very same problem that is solved by the present invention – excessive power consumption of an unlocking device.

The Applicants respectfully assert that the Examiner's reliance on Stengel to correct the fails of Lemelson is misplaced. As stated previously, nothing is disclosed in Stengel regarding the applicability of the battery saver for unlocking devices. Thus, the Examiner has failed to establish a *prima facie* case of obviousness.

The mere fact that the cited references can be combined or modified is not sufficient to establish *prima facie* obviousness. *MPEP* 2143.01(III). Here, the references clearly fail to recognize, appreciate, teach, suggest, or show any method for conserving power within an unlocking device as claimed within the application-at-issue. Nevertheless, the Examiner states on page 4 of the Final Office Action that "it is conventionally understood that saving power is desirable in nearly all electronic devices." The Applicants respectfully assert that the Examiner's conclusion is merely hindsight reconstruction of the claimed invention and fails to satisfy the requirement that the prior art, and not the Examiner, must suggest the desirability of the claimed invention.

The Applicants also note that on page 5 of the Final Office Action that the Examiner states that "one cannot show nonobviousness by attacking the references individually were the rejections are based on combinations of references." The Applicants maintain that this language, apparently from paragraph 7.37.13 of MPEP 707.07(f), is incorrectly used by the Examiner.

In contrast to the Examiner's assertion, the Applicants have not been attacking the references individually. Instead, the Applicants have been methodically pointing out why the prior art as a whole does not teach the desirability of the claimed combination. Accordingly, all rejections should be withdrawn and all claims should be passed to issue because the prior art does not teach or suggest the desirability of the claimed combination.

C. Level of Ordinary Skill in the Art

The level of ordinary skill in the art at the time of the invention should be determined and employed to maintain objectivity in any rejection under 35 U.S.C. § 103. *MPEP* 2141.03. Here, however, the Applicants maintain that the level of ordinary skill in the art was overlooked.

The inventors of the application-at-issue recognized the advantages of conserving power within an unlocking device. In contrast, Lemelson and Stengel failed to recognize the importance of this feature.

For instance, in Lemelson, an unlocking device is disclosed that uses a "<u>suitable</u> <u>source</u> of electrical energy such as a battery or line current, a combination of the two or other means for supplying electrical energy for powering the electronic devices associated with the various components illustrated and described." *Lemelson*, Col. 4, lns. 47-52. (emphasis added). Accordingly, Lemelson indicates that if a battery is not "a suitable source of electrical energy," then instead of trying to save power – a person should just get a bigger or better source of electrical energy. Therefore, Lemelson failed to recognize the desirability of conserving power in an unlocking device.

Turning to Stengel, once again nothing is stated about conserving power within an unlocking device. Instead, Stengel is concerned with a radio receiver that goes to sleep after synchronizing with a signal. Stengel, Col. 5, ln. 66 – Co. 6, ln. 7. Accordingly, Stengel also did not recognize the desirability of the claimed invention.

Nevertheless, the Examiner maintains that "one of ordinary skill in the art recognizes power saving as a solution to the problem and Stengel teaches a method (the claimed method) of saving power in a receiver." *Final Office Action*, p. 4.

However, the objective evidence of record contradicts the Examiner's findings regarding what one of ordinary skill in the art, at the time of the invention, would have been motivated to do. In particular, Lemelson indicates that if a power supply (e.g., a battery) is not a suitable source of electrical power, then instead of trying to conserve power, a line current or other means should be used. Accordingly, one skilled in the art would not be motivated to use Stengel for implementing the power saving features as set forth in the present application for an unlocking device. Thus, all claims in the application-at-issue should be passed to issue because the objective evidence points away from the Examiner's conclusions regarding the ordinary skill in the art at the time of the invention.

C. All Elements of the Claims

In a proper rejection under 35 U.S.C. § 103, all claim limitations must be taught or suggested by the prior art. MPEP 2143.03. Here, the Examiner has overlooked the

claim language to determine if all claim limitations have been taught or suggested by the prior art. Accordingly, the rejections should be overturned.

All of the words in a claim, not just some of the words, must be considered when judging the patentability of a claim against the prior art. *MPEP* 2143.03. Otherwise, the wording of the claim becomes meaningless.

In the application-at-issue, all of the claims use wording that, generally stated, requires a circuit to be enabled for an extended time period so an input code can be received via an electromagnetic signal. Also, if the input code matches an access code, then a signal is provided to unlock a device.

In contrast, Lemelson does not teach or suggest enabling a circuit for an extended time period so an input code can be received via an electromagnetic signal wherein, if the input code matches an access code, then a signal is provided to unlock a device. Instead, the receiver circuit in Lemelson is continuously enabled. Therefore, there is no need for Lemelson to devise power saving features wherein, as claimed by the Applicants, a circuit is enabled for different time periods.

Likewise, Stengel does not teach or suggest enabling a circuit for an extended time period so an input code can be received via an electromagnetic signal wherein, if the input code matches an access code, then a signal is provided to unlock a device. Instead, the receiver of Stengel is directed to a radio receiver. Therefore, there is nothing disclosed regarding receiving input codes while a circuit is enabled for an extended time period wherein, if the input code matches an access code, then a signal is provided to unlock a device. Accordingly, all claims in the application-at-issue should be found allowable because Lemelson and Stengel both fail to teach or suggest all limitations of the claims-at-issue.

Moreover, the Applicants respectfully assert that the prior art of record also fails to teach or suggest, among other things: a low-battery indicator, a two-current solenoid driver, reading and writing codes to memory, a keyboard for entering a code, a program key on the keyboard, a serial number written to the memory, and other features as set forth in various dependent claims of the application-at-issue.

For the above reasons, the rejection of claims 1-4, 6-9, 11-17, 19 and 20-48 should be overturned.

Second Ground of Rejection Under 35 U.S.C. § 103(a)

Applicants assert that all claims are allowable over the prior art of record. As previously stated above, Lemelson and Stengel fail to teach or suggest the claims-atissue. Stamm does not correct this defect.

During prosecution of the application-at-issue, Stamm is only cited as a basis for rejecting dependent claims 5, 10 and 18, and is not used as a basis for rejecting any independent claims. However, since the parent claims are allowable over the prior art as argued above, the dependent claims are allowable as well.

Turning to the disclosure of Stamm, what is taught therein pertains to a battery operated access control card wherein infrared signals can be used. However, unlike what is claimed, Stamm does not teach or suggest using infrared within an unlocking device that is periodically enabled to receive an input code. Accordingly, the rejection of the claims-at-issue should be overturned.

Thus, for the reasons stated above, the rejection of claims 5, 10 and 18 should be overturned.

VIII APPENDIX OF CLAIMS

The text of the claims involved in the appeal are:

A method comprising the steps of:
deactivating a circuit during a first time period;
enabling a portion of the circuit for a second time period;
sensing an electromagnetic signal during the second time period;
enabling the circuit for an extended time period that is greater than the second
time period upon the sensing of the electromagnetic signal;

processing the electromagnetic signal during the extended time period to obtain an input code;

comparing the input code to an access code; and providing a signal to unlock a device if the input code matches the access code.

- 2. The method of claim 1, further comprising the step of generating an oscillation signal and deactivating the circuit in response to the oscillation signal.
- 3. The method of claim 1, further comprising the step of toggling a switch to enable the circuit for the extended time period.
- 4. The method of claim 1, further comprising the step of operating at least one of the following in response to the signal to unlock the device: an electromechanical driver; a solenoid; a DC motor; an electromechanical relay; and, a solid-state relay.
- 5. The method of claim 1, wherein the electromagnetic signal is infrared.
- 6. The method of claim 1, wherein the electromagnetic signal is within a radio frequency.

- 7. The method of claim 1, further comprising the step of activating another portion of the circuit to compare the input code to an access code.
- 8. A method comprising the steps of:

periodically enabling and disabling a circuit during each of a plurality of duty cycles wherein the circuit is enabled for a time t_1 during each of the duty cycles;

receiving an input code transmitted via an electromagnetic signal; comparing the input code to an access code;

enabling the circuit as the input code is being received for a time t_2 that is greater then said time t_1 ; and,

providing a signal to unlock a device if the input code matches the access code.

- 9. The method of claim 8, further comprising the step of sensing receipt of the electromagnetic signal.
- 10. The method of claim 8, wherein the electromagnetic signal is infrared.
- 11. The method of claim 8, wherein the electromagnetic signal is within a radio frequency.
- 12. The method of claim 8, further comprising the step of generating an override signal during at least a portion of the step of enabling the circuit as the input code is being received.
- 13. The method of claim 8, further comprising the step of toggling a switch during at least a portion of the step of enabling the circuit as the input code is being received.
- 14. The method of claim 8, further comprising the step of operating at least one of the following in response to the signal to unlock the device; an electromechanical driver; a solenoid; a DC motor; an electromechanical relay; and, a solid-state relay.

15. A method for operating a circuit on current drained from a battery comprising the steps of:

generating a signal to indicate detection of a device capable of providing an electromagnetic signal;

receiving an input code transmitted by the electromagnetic signal; increasing the current drained from the battery; comparing the input code to an access code;

providing an output to an unlock device if the input code matches the access code; and,

decreasing the current drained from the battery after receiving the input code.

- 16. The method of claim 15, further comprising the step of increasing the current drained from the battery comprising toggling a switch and the step of decreasing the current drained from the battery comprising toggling the switch.
- 17. The method of claim 15, further comprising the step of generating an oscillation signal during the step of receiving the input code.
- 18. The method of claim 15, wherein the electromagnetic signal is infrared.
- 19. The method of claim 15, wherein the electromagnetic signal within a radio frequency.
- 20. The method of claim 15, further comprising the step of operating at least one of the following in response to the signal to unlock the device: an electromechanical driver; a solenoid; a DC motor; an electromechanical relay; and, a solid-state relay.
- 21. The method of claim 1 further comprising the step of periodically enabling a processor for performing at least the step of comparing the input code to the access code.

- 22. The method of claim 1 further comprising the steps of receiving another input code from a keyboard and comparing the other input code to the access code or another access code.
- 24. The method of claim 22 further comprising the step of receiving a signal in response to pressing a program key on the keyboard.
- 25. The method of claim 1 further comprising the steps of periodically enabling and disabling a low-battery detection circuit for measuring a battery voltage.
- 26. The method of claim 1 further comprising the steps of providing a non-zero power output to the device, providing a lower non-zero power output to the device, and transitioning from the non-zero power output to the lower non-zero power output.
- 27. The method of claim 1 further comprising the step of writing the access code into a memory in response to a write signal received through a communication port.
- 28. The method of claim 27 further comprising the step of writing a serial number into the memory.
- 29. The method of claim 28 further comprising the step of transmitting the serial number through the communication port.
- 30. The method of claim 1 further comprising the step of transmitting the access code through a communication port in response to a read signal.
- 31. The method of claim 8 further comprising the step of periodically enabling a processor for performing at least the step of comparing the input code to the access code.

- 32. The method of claim 8 further comprising the steps of receiving another input code from a keyboard and comparing the other input code to the access code or another access code.
- 33. The method of claim 32 further comprising the step of receiving a signal in response to pressing a program key on the keyboard.
- 34. The method of claim 8 further comprising the steps of periodically enabling and disabling a low-battery detection circuit for measuring a battery voltage.
- 35. The method of claim 8 further comprising the steps of providing a non-zero power output to the device, providing a lower non-zero power output to the device, and transitioning from the non-zero power output to the lower non-zero power output.
- 36. The method of claim 8 further comprising the step of writing the access code into a memory in response to a write signal received through a communication port.
- 37. The method of claim 36 further comprising the step of writing a serial number into the memory.
- 38. The method of claim 37 further comprising the step of transmitting the serial number through the communication port.
- 39. The method of claim 8 further comprising the step of transmitting the access code through a communication port in response to a read signal.
- 40. The method of claim 15 further comprising the step of periodically enabling a processor for performing the step of comparing the input code to the access code.

- 41. The method of claim 15 further comprising the steps of receiving another input code from a keyboard and comparing the other input code to the access code or another access code.
- 42. The method of claim 41 further comprising the step of receiving a signal in response to pressing a program key on the keyboard.
- 43. The method of claim 15 further comprising the steps of periodically enabling and disabling a low-battery detection circuit for measuring a battery voltage.
- 44. The method of claim 15 further comprising the steps of providing a non-zero power output to the unlock device, providing a lower non-zero power output to the unlock device, and transitioning from the non-zero power output to the lower non-zero power output.
- 45. The method of claim 15 further comprising the step of writing the access code into a memory in response to a write signal received through a communication port.
- 46. The method of claim 45 further comprising the step of writing a serial number into the memory.
- 47. The method of claim 46 further comprising the step of transmitting the serial number through the communication port.
- 48. The method of claim 15 further comprising the step of transmitting the access code through a communication port in response to a read signal.

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Page 17 of 17